



NWS Wilmington, Ohio

March 2023

Regional Climate Summary

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Several temperature fluctuations occurred throughout the month. Above normal precipitation occurred with a few events having multiple inches of precipitation. A wide variety of weather occurred during the month including tornadoes, strong winds, flooding, and snow.

Temperatures

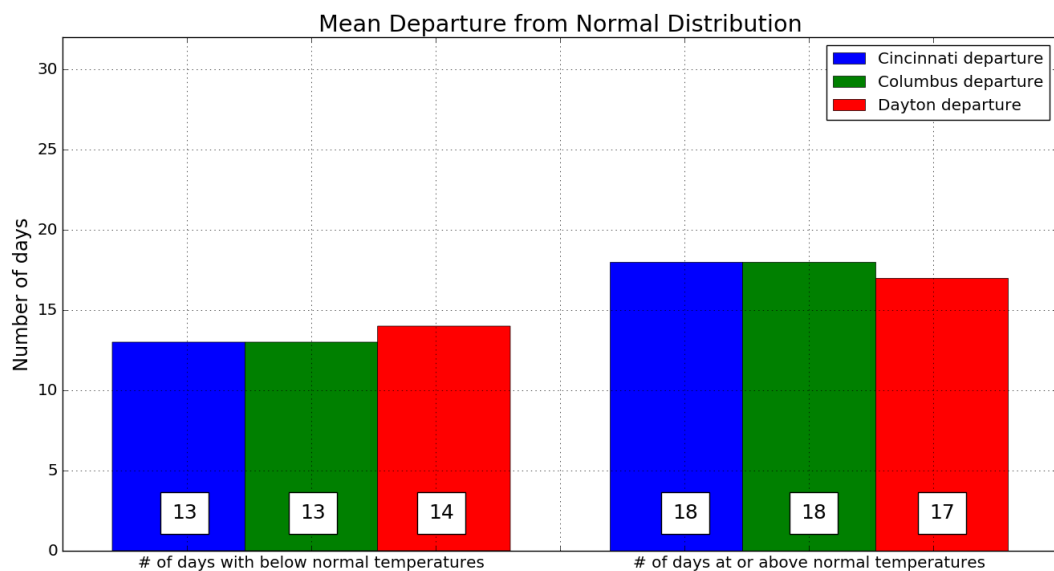
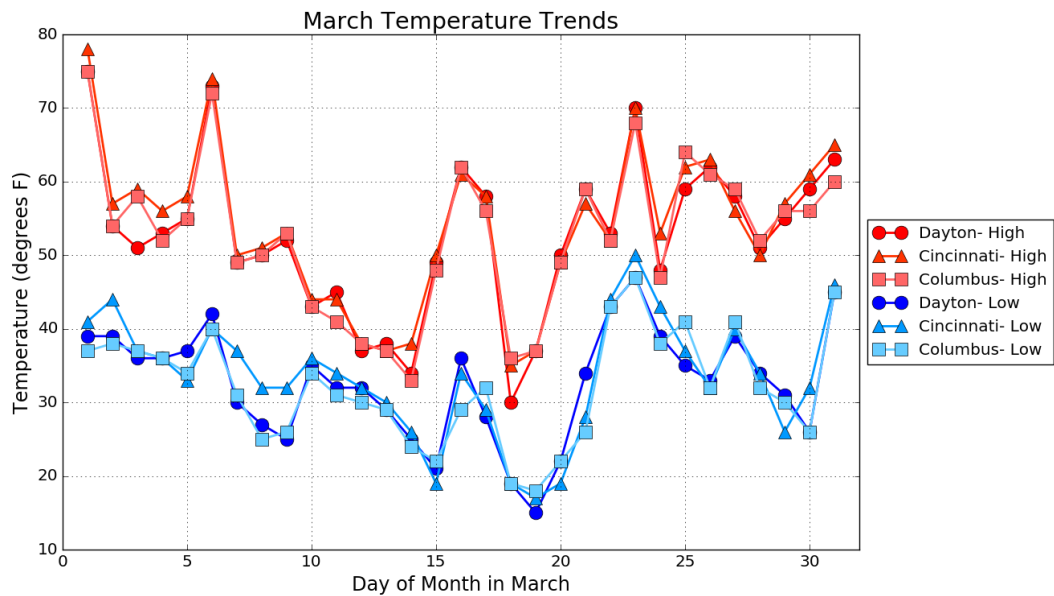
While temperatures, on average, for the month were not that far away from normal values, individual days during the month had large departures from normal values. A warm start to the month during the first week transitioned to near normal or slightly below normal for much of the second week. By the end of the second week on the 14th temperatures were generally over 10 degrees below normal. Even colder air on the 18th and 19th led to average temperatures being over 15 degrees below normal. This wave of cold air moderated by the 23rd with average temperatures around 15 degrees above normal for a brief period of time. However, for the final several days, temperatures were generally fairly close to seasonal norms, with highs in the 50s and 60s and lows in the 30s and 40s.

With all the temperature fluctuations these were the temperature records for the month. A record high temperature of 75°F was set at Dayton on March 1st, breaking the old record for the site of 66°F set in 1976. A record high temperature of 74°F tied the old daily site record for March 6th at Cincinnati, Ohio that was previously set in 1910 and 1973. A record high temperature of 78°F was set at Cincinnati on March 1st, breaking the old record of 71 set in 1976. A record high temperature of 75°F was set at Columbus on the 1st breaking the old daily site record of 65°F set in 1972.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	43.7°F	54.0°F	33.5°F	+ 0.1°F	78°F (03/01)	17°F (03/19)
Columbus (CMH)	42.4°F	52.6°F	32.1°F	+ 0.8°F	75°F (03/01)	18°F (03/19)
Dayton (DAY)	42.6°F	52.6°F	32.6°F	+ 0.5°F	75°F (03/01)	15°F (03/19)



Temperatures (Continued)



Precipitation

While many days during the month were dry or had only light precipitation, there were a few days during the month that had over an inch of precipitation leading to above normal precipitation values for the month. In fact, some spots received more than double the normal amount of rain for the month. These heavier precipitation amounts led to some flooding during the month. The heavier precipitation days included March 3rd where some locations received upwards of around 3 inches of rainfall. March 23rd through the morning of the 25th was a multi-day rainfall event with rainfall values during this time ranging from 1 ½ inches to upwards of close to 5 inches of rainfall. The final heavy rainfall event for the month occurred at the end of the month when another system moved through and brought an additional half to three quarters of an inch for much of the area.

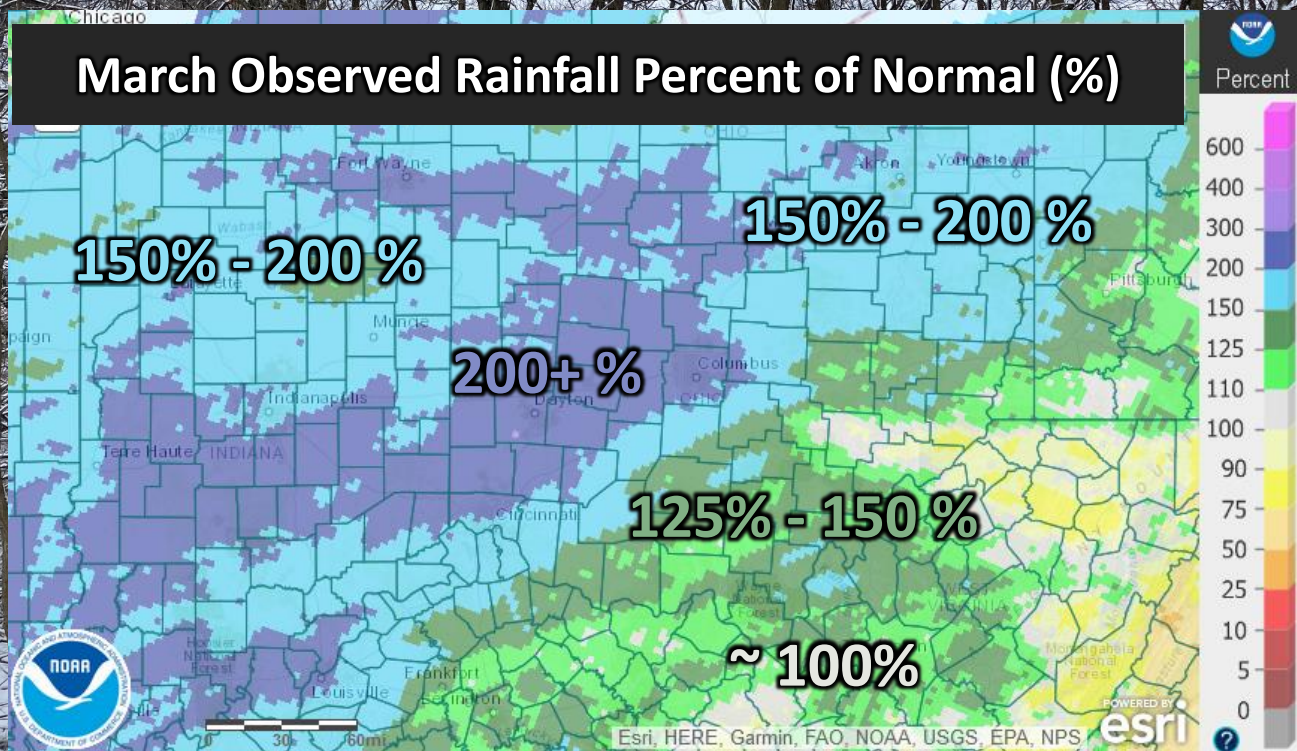
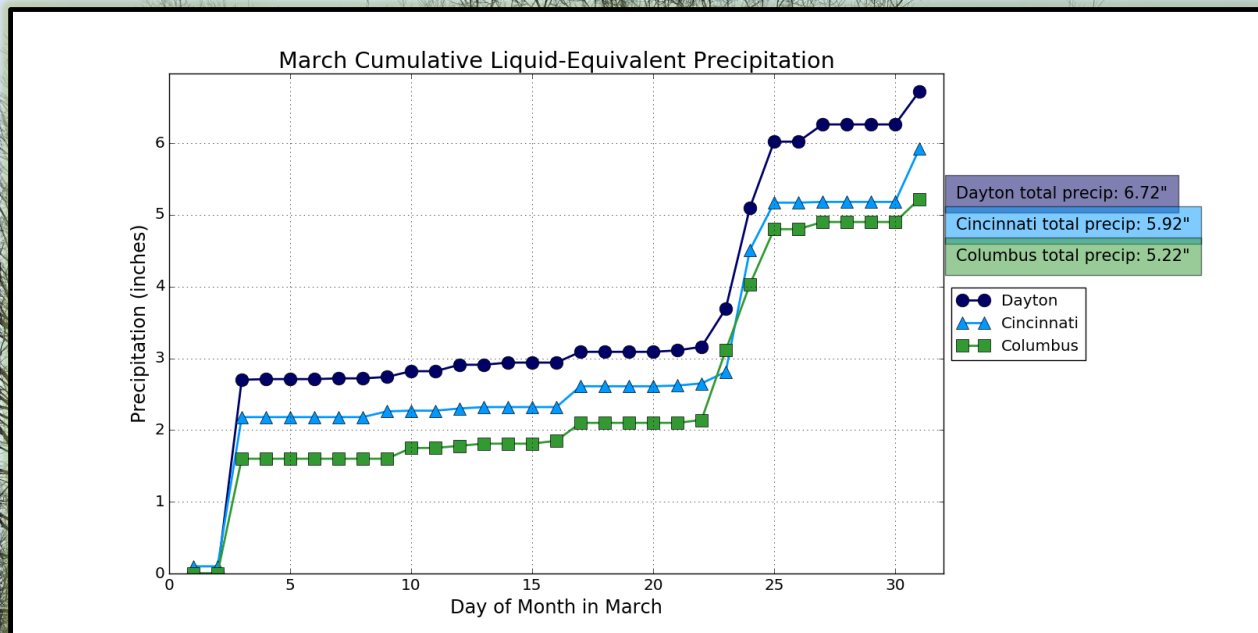
Snowfall was rather limited during the month. One a few light snowfall events occurred, with the heaviest and most widespread one evolving on the 12th of the month when 1-2" of snow occurred over a large portion of the region.

Multiple precipitation records were broken during the month. A record daily rainfall of 2.70" was set at Dayton on March 3rd. This broke the old daily site record of 1.21" set in 1953. A record rainfall of 2.08" of rainfall was set at Cincinnati on March 3rd, breaking the old daily site record of 1.40" set in 1977. A daily record rainfall of 1.60" was also set at Columbus on the 3rd breaking the old daily site record of 1.31" set in 2020.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	5.92"	+ 1.76"	2.08"	03/03	0.1"	0.1"	03/12
Columbus (CMH)	5.22"	+ 1.60"	1.60"	03/03	1.0"	0.4"	03/12
Dayton (DAY)	6.72"	+ 3.22"	2.70"	03/03	1.3"	0.9"	03/12



Precipitation (Continued)



Severe Weather

An exceptionally strong low pressure system moved through the Ohio Valley on Friday, March 3, 2023. The intense surface low tracking through the region resulted in local barometric pressure readings that were among the 5 lowest ever recorded pressure values in the area. With this intense system came a spectrum of hazards and damage, including high winds gusting as high as 71 mph at the Maysville Kentucky Mesonet site. Additional wind gusts between 55-70 mph were reported from northern Kentucky through southern and into central Ohio, causing widespread damage. Widespread flooding also occurred, with rainfall reports from 2 to 3" in a 12 hour period. Four tornadoes occurred including 3 EF0s and 1 EF1.

Isolated severe weather occurred on the 23rd. On the 25th widespread high winds led to damage reports across the area.

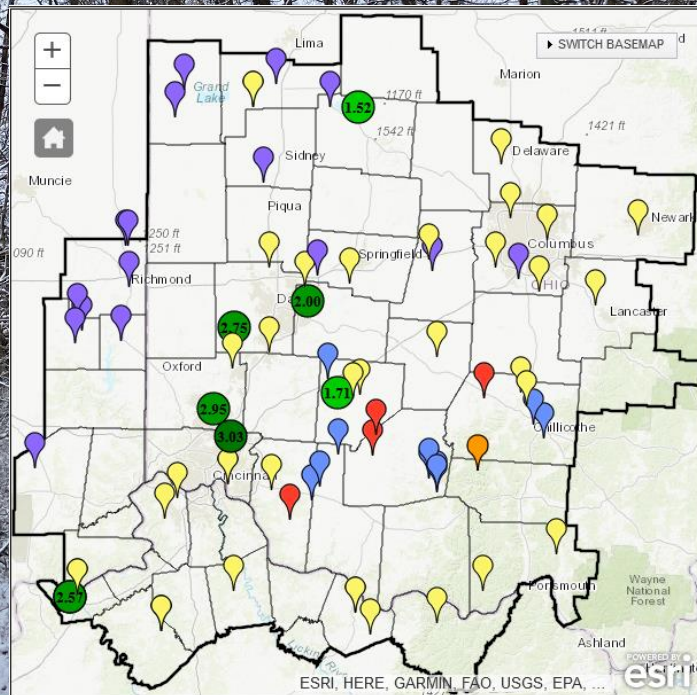
Rain

<0.25" <0.50" <0.75" <1" <2" <3" >=3"

LOCAL STORM REPORTS:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Tornado | <input checked="" type="checkbox"/> Hail |
| <input checked="" type="checkbox"/> Flood | <input checked="" type="checkbox"/> Flash Flood |

- | | |
|--|--|
| <input checked="" type="checkbox"/> Thunderstorm Wind Gust | <input checked="" type="checkbox"/> Thunderstorm Wind Damage |
| <input checked="" type="checkbox"/> Non-Thunderstorm Wind Gust | <input checked="" type="checkbox"/> Non-Thunderstorm Wind Damage |



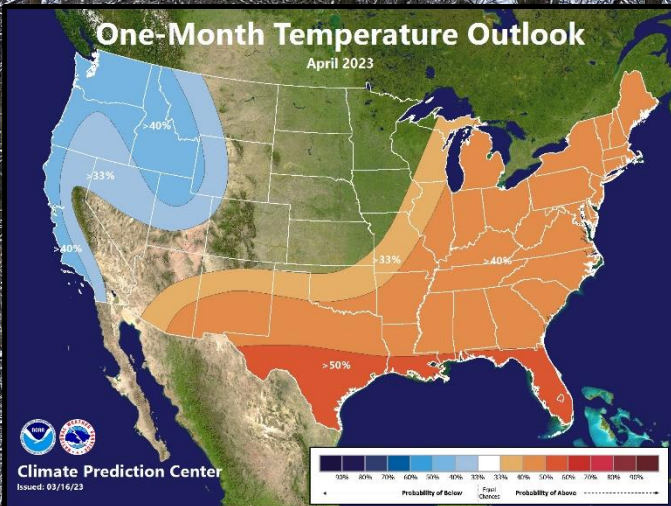
April Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for above normal temperatures across the region for April, with near to slightly above normal precipitation.

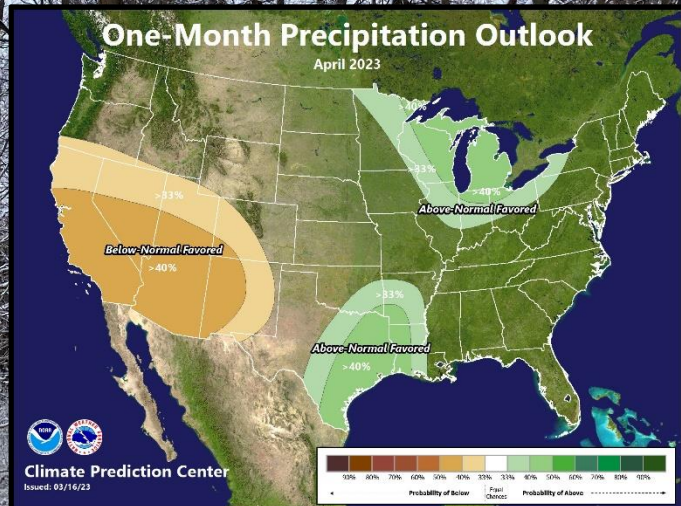
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	54.6°F	65.5°F	43.7°F
Columbus (CMH)	53.2°F	64.1°F	42.2°F
Dayton (DAY)	53.7°F	64.5°F	42.9°F

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	4.53"	0.4"
Columbus (CMH)	3.85"	0.5"
Dayton (DAY)	4.46"	0.4"

Upcoming Temperature Outlook

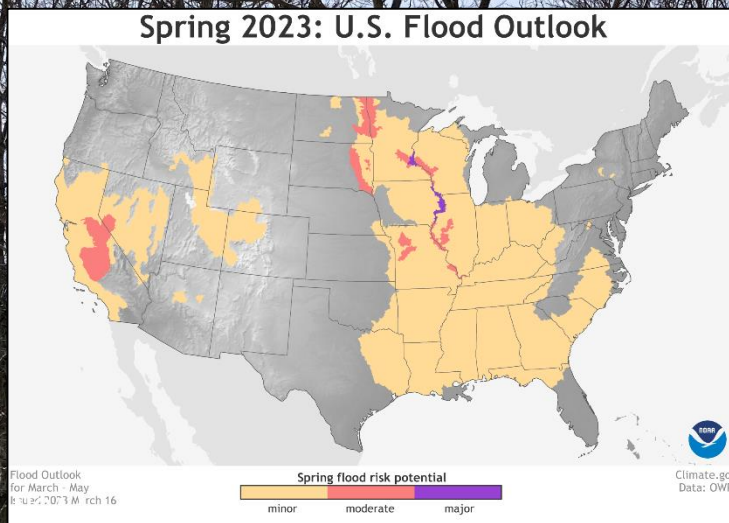


Upcoming Precipitation Outlook

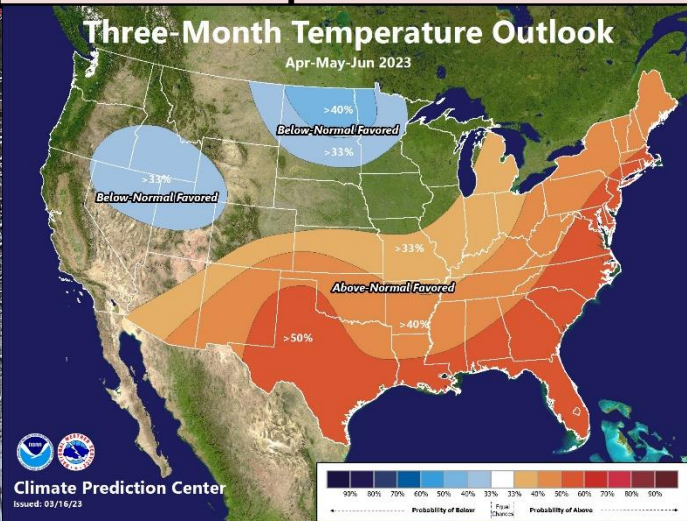


April-June Outlook

ENSO neutral conditions are expected at least the next few months. There is an increased likelihood of above normal temperatures and above normal precipitation. The flood outlook spring map shows the locations where there is a greater than 50% chance of minor to major flooding during March through May.



Three-Month (AMJ) Temp. Outlook



Three-Month (AMJ) Precip. Outlook

